Appln. No. 10/830,081

Amdt. dated January 8, 2008

Reply to Office action of November 14, 2007

Amendments to the Specification

On page 1, please replace the paragraph beginning on line 2, with the following paragraph:

The present invention generally relates to ommunication communication networks, and more particularly to communication networks—using compression means and enables better utilization of the bandwidth available.

On page 4, please replace the paragraph beginning on line 1, with the following paragraph:

According to an embodiment of the invention, a selected corresponding representation signal has less number of bits than the frame (or sub-frame) signal which it represents. However, as should be appreciated by those skilled in the art, this does not necessarily have to be the case, and the number of bits in the representation signal could be essentially equal to the number of bits in the frame (or sub-frame) signal, and in extreme cases even exceed that number, as long as the overall number of bits required to represent the plurality of frames of the encoded signal is less than that of the bits included in the signal received.

On page 4, please replace the paragraph beginning on line 17, with the following paragraph:

According to another embodiment of the present invention, the selecting step of the corresponding representation signal comprises using representation signal that is essentially identical to the corresponding corresponding frame (or sub-frame) signal.

On page 5, please replace the paragraph beginning on line 1, with the following paragraph:

through the use of a representation signal which corresponds to that frame signal, or through the use of regenerating the sub-frame signals which together comprise that frame signal.

On page 6, please replace the paragraph beginning on line 28, with the following paragraph:

By another embodiment of the present invention the method provided also comprising: comprises generating reconstruction bits for at least some of the selected corresponding representation signals so as to enable the regeneration of their corresponding frame (or sub-frame, as the case may be) signals.

On page 7, please replace the paragraph beginning on line 4, with the following paragraph:

In accordance with still another preferred embodiment, the generating of the reconstruction bits is carried out so as to comply with spectral characteristics and energy characteristics of an original signal that was received in its encoded form.

On page 10, please replace the paragraph beginning on line 12, with the following paragraph:

In accordance with a preferred embodiment of this aspect of the invention, the processor is also operative to generate, for at least some of the selected

corresponding representations signals, regeneration bits which are enable the regeneration, approximately or identically, of non-transmitted bits of at least some of the frame signals, while the transmitter is operative to transmit the regeneration bits together with transmitted bits of the selected corresponding representations signals.

On page 11, please replace the paragraph beginning on line 3, with the following paragraph:

According to yet another preferred embodiment, there is provided an apparatus for use at a transmitting end of a communication path, the apparatus comprising:

a receiver operative to receive a compressed signal provided at a first bitrate, the compressed signal being represented by a plurality of frames generated by a codec, where each of said frames comprises at least one frame signal;

a processor operatively associated with the receiver and operative to perform the following:

determine whether a communication activity level in communication between along a transmission path exceeds a pre-defined activity threshold level, and

if said communication activity level exceeds said pre-defined activity threshold level:

classify said at least one frame signal in accordance with at least one characterization criterion selected from among a plurality of predetermined characterization criteria, and

select an appropriate corresponding representation signal by which to represent each of the at least one frame signal by; and

a transmitter operative to transmit the compressed signal at the first bitrate if the communication activity level does not exceed the activity threshold level, and, if the communication activity level exceeds said activity threshold level, to transmit the selected corresponding representation signals at a second bit-rate which is lower than the first bit-rate.

On page 12, please replace the paragraph beginning on line 27, with the following paragraph:

Reference is now made to Fig. which is a simplified block diagram illustration of a preferred implementation of a portion of a communication network 10 constructed and operative in accordance with a preferred embodiment of the present invention. By way of example, and without limiting the generality of the foregoing, the network 10 is shown to include a wireless communication network such as a cellular based wireless telecommunication network for mobile applications. The cellular based wireless telecommunication network for mobile applications may preferably be a digital cellular telecommunication network, such as a Global System for Mobile communications (GSM) network.

Each BTS may be referred to as a transmitting end when transmitting information to any BSC and as a receiving end when receiving information from any BSC. Similarly, each BSC may be referred to as a transmitting end when transmitting information to any BTS and as a receiving end when receiving information from any BTS. By way of example and without limiting the generality of the foregoing, communication between a single transmitting end 20 and a single receiving end 25 is depicted in Fig. *2. The transmitting end 20 may include one of the following: a BTS; and a BSC. If the transmitting end 20 includes a BTS, the receiving end 25 preferably includes a BSC. Conversely, if the transmitting end 20 includes a BCS, the receiving end 25 preferably includes a BTS. By way of example, in the embodiment depicted in Fig. *2 the transmitting end 20 includes a BTS.

On page 16, please replace the paragraph beginning on line 11, with the following paragraph:

Receiving end 25 includes apparatus 50 which operates inversely to the operation of apparatus 30 and is <u>adapted adapted</u> to regenerate the compressed signal from signals received from transmitting end 20. Specifically, apparatus 50 in this example includes a receiver 55, a processor 60, and a transmitter 65.

On page 18, please replace the paragraph beginning on line 16, with the following paragraph:

Reference is now made to Fig. which is a simplified block diagram illustration of a preferred implementation of a portion of a communication network 100 constructed and operative in accordance with another preferred embodiment of the present invention.

On page 18, please replace the paragraph beginning on line 21, with the following paragraph:

Preferably, the network 100 of Fig. 21 and the network 10 of Fig. 12 provide similar services and have similar characteristics except for the following: the network 100 is specifically adapted to support speech transmission; and bit-rate reduction in communication of a compressed speech signal or a reduction of a number of communicated bits in communication of the compressed speech signal is attained by means other than the means used in the network 10.

On page 22, please replace the paragraph beginning on line 9, with the following paragraph:

Reference is now made to Fig. 3 which is a simplified flowchart illustration of a preferred method of operating the portion of network 10 illustrated in Fig. 32.

On page 23, please replace the paragraph beginning on line 10, with the following paragraph:

Reference is now made to Fig. 4 which is a simplified flowchart illustration of a preferred method of operation of the portion of the network 100 of Fig. 21.